Refer to: Manwaring JH: California coroners' patterns (Government and Medicine). Calif Med 118:52-56, Jan 1973

Government and Medicine

California Coroners' Patterns

JOHN H. MANWARING, M.D., *San Rafael*

EACH COUNTY IN CALIFORNIA has a coroner or medical examiner charged with the responsibility of investigating and evaluating deaths that are, or possibly are, other than natural, and also with the responsibility of discovering and preserving evidence needed in any incident litigation or trial which may result from that death. In general these officers operate under the authority of California Government Code 27491 with additional responsibilities under various sections in the Penal Code and the Health and Safety Code. Interpretation of the law, and thus the method of carrying out these responsibilities, is to some extent in the hands of the coroner or medical examiner, utilizing the district attorney and county counsel for legal advice and opinions in areas of question.

While there are obviously many areas of uniformity of activity in these functions, there is significant variation in certain aspects. With the cooperation of the California Coroners' Association, the Forensic Pathology Committee of the California Society of Pathologists has attempted to survey these activities and evaluate variations. It would be impossible to do this in depth without substantial funds, which were not available. However, even the somewhat superficial survey here reported, which has been made by physicians familiar with the patterns in various counties with the whole-hearted cooperation of the coroners themselves, has revealed much that we believe can be of value.

A simple questionnaire devised by the Forensic Pathology Committee was submitted to the Executive Committee of the California State Coroners' Association. It was approved and endorsed by its executive committee and by its president, William A. Scott.

In four counties the coroner or medical examiner is a physician. In Los Angeles, Santa Clara and San Francisco counties the coroners are forensic pathologists. In Marin County the coroner is a surgeon who had had specialized training and experience in coroners' offices before his election. In most counties the coroner is an elected officer. In 31 counties the sheriff is the coroner. In the remainder, the office may be filled by a mortician or a lawyer and occasionally the coroner is a layman. In some counties, even when these offices are separate, the sheriff is designated to serve as coroner in periods of absence or disability of the coroner. The coroner is usually the public guardian and public administrator also, and in San Benito County he is, in addition to all this, tax collector and civil defense director.

The coroner usually appoints his deputies. In several counties, particularly the larger urban ones, there is an examination for selection of dep-

The author is Chairman of the Forensic Pathology Committee of the California Society of Pathologists. The other members of the Forensic Pathology Committee are: John E. Hauser, M.D., Allan B. McNie, M.D., Richard O. Myers, M.D., Thomas T. Noguchi, M.D., Irving Root, M.D., and Melvin L. Sommer, M.D. Legal advisor is L. Miles Snyder, Esq., Executive Director and General Counsel of the California Society of Pathologists.

Reprint requests to: J. H. Manwaring, M.D., 711 D Street, San Rafael, Ca. 94901.

uties, and specialized qualifications have been established. In many counties the appointments are at the discretion of the coroner, without clear-cut guidelines for selection. Deputies chosen generally have had some investigative experience; this is a requirement in those counties which have written qualifications. Rarely, however, have the deputies had any medical experience.

Coroner Training

In general, the deputies are trained "on-the-job" under the guidance of an experienced deputy, with consultation with the coroner and pathologists being readily available. Medical training of deputies has been sketchy. There have been several brief symposia for this purpose, but they have been rare and have not covered much of the state. For four years a Coroners Investigator's Institute giving 80 hours of instruction in a two-week period has been available at Yuba College. This is to be moved this year to either Merced or Stanislaus County, Yuba continuing with a more intensive Homicide Institute. These courses deal primarily with the investigative rather than the medical aspects. A Forensic Pathology Institute has recently been organized in Alameda County by the pathologists in the area. Curricula for training coroner's personnel in both investigative and medical fields are being developed there.

Recently organized and now available is a basic Law Enforcement Institute given annually in several of the larger community colleges. This is an eight-week course, with a full eight-hour daily program leading to a basic certificate in Peace Officers' Standards of Training. It is hoped that more coroner's deputies will be allowed to take such a comprehensive course in the future, even though it may involve quite a significant expense to the county authorizing such training.

In many counties, especially the larger ones, the coroners' office policies describing criteria for the evaluation of cases are printed in a manual which contains amplifying and explanatory material. In other counties, little is written except for the listing of cases required by California Government Code Section 27491. There is only sketchy dissemination of this information among the medical profession, although some counties are making such instruction a part of their indoctrination programs for new members of their medical societies. Because physicians often are active in more than one county and policies differ in various counties, this is a source of confusion. For example, there is great variation with regard to the determination of what constitutes a death "without a physician in attendance." We conclude that there is a definite need for greater physician awareness of the requirements of the law and the local policies in this regard. A statewide manual for uniform policy would be most helpful.

In most counties about 30 percent of all deaths fall into the jurisdiction of the coroner. This varies from reported levels of 17 percent to 60 percent. In cases accepted as coroner's cases, the death certificate to be signed by the coroner, autopsy is performed in 90 to 100 percent in most counties, dropping to as low as 40 percent in a few counties. Geography seems to play little part in the determination of when to carry out autopsy. Rather, the decision seems to depend on finances and the opinions and policies of the county coroner.

Autopsy by Pathologists

In nearly all counties, the autopsy is performed by a local pathologist and, even where no pathologist is available, tissues are sent to a pathologist with the report of the physician doing the gross autopsy. In homicide cases a forensic pathologist is always utilized even in those counties having no local pathologists to perform the gross examination.

In the larger urban counties central morgues have been created. In most counties, the facilities of the local mortuaries are used, and are considered acceptable, although obviously a centralized facility offers many advantages. In many such cases autopsy is not done until after vascular embalming. In at least two of the larger counties, mortuaries are utilized in the more remote areas rather than transport of the bodies to the central morgue. One small county lacks even a mortuary and in coroner's cases bodies from this county are, of necessity, transferred for autopsy to the nearest available facility, which happens to be in Nevada.

Several coroners have expressed the desire to have a central morgue, but generally they do not wish this to be part of the county or district hospital. The only coroner's office which classed its facilities as unsatisfactory uses the local hospital for autopsy cases, although it is planning a cen-

tral morgue to eliminate this dissatisfaction. On the other hand, several coroners are associated with local hospitals and feel that the arrangement is quite satisfactory. In general, it would appear that physicians and hospital administrators are, on occasion, apt to make requests or demands which are less than reasonable, in light of the requirements and limitations of the law under which the coroner must act. Obviously a physician coroner is in an advantageous position in using local hospitals, and a mortician or sheriff coroner at a disadvantage in dealing with hospital and medical personnel.

The extent of the autopsy, including the questions of head examination, microscopic study of tissue, and the use of toxicologic study is generally decided jointly by the coroner and the pathologist; the district attorney may also assist in establishing policy regarding the extent of the autopsy. Only slight difficulty is reported in this respect in examination of embalmed bodies; generally, necessary blood specimens are withdrawn before embalming and if other toxicologic studies are essential autopsy also is done before embalming. Vascular embalming obviously forecloses the possibility of bacteriologic cultures and virologic studies. In homicide cases the bodies are uniformly examined before embalming is done. Blood and specimens obtained in the hospital before death are often invaluable in supplying needed answers to toxicologic questions, and often to bacteriologic questions as well. It is possible that laboratory work done before death, and in particular toxicologic findings, are properly privileged and confidential information, which would limit the public use or knowledge of these pre-mortem findings.[1] Facilities for any bacteriologic study are poor to non-existent in most mortuaries. Smears and special stains on tissue sections seem to be about all that can be expected in any but the most unusual cases.

X-ray facilities are also lacking in most coroners' facilities. Local hospitals supply this service when it is deemed essential, but it is used somewhat rarely in view of the difficulty and expense, as well as the distaste of most hospitals for bringing in bodies, especially during the hours when many patients may be in the department. X-ray examination is usually reserved for search for bullets which cannot be easily located, and for suspected homicide cases. It is generally felt that x-ray services could be used advantageously in many other cases.

Urban centers with central morgues often have facilities for doing their own laboratory and toxicologic studies, microscopic slide preparation, photography, and, perhaps, bacteriology. In many counties local pathologists perform the autopsies and do all or some of the ancillary studies in their own clinical laboratory facilities. In counties lacking a local pathologist, or clinical laboratory, specimens of tissue and body fluids are sent by mail to an appropriate laboratory, usually in a nearby county. Close consultation between the coroner, the autopsy surgeon and the toxicologist or consultant pathologist usually makes this arrangement reasonably satisfactory. Obviously, the service could be improved if fewer persons were involved, but the compromise is a practical necessity. Specialists are used, however, even in these remote areas when the magnitude of the case justifies, particularly in homicide cases.

Autopsy Reports

Reasonably complete autopsy reports are prepared in every reporting county. Such reports are usually available within a few days, rarely more than three weeks being needed to complete all studies and reports. In at least one county the reports are recorded on tape, and are transcribed only as needed. The complete report generally contains a summary of the investigation by the deputy coroner, the gross and microscopic studies, and the toxicologic and laboratory findings. These reports are legally public property, and as such are usually made available to other agencies, attorneys, local hospitals, and physicians. In some counties toxicologic results and investigator's reports are not sent with the autopsy report unless specifically asked for. A small fee may be charged for the reports.

Tissue blocks and microscopic slides are filed permanently in either the central facility or in the custody of the local pathologist who performed the autopsy. Toxicologic specimens and additional gross tissues are stored for variable periods. In some counties this may be only until the autopsy report is complete. In many counties these materials are stored for a minimum of one year, in others it is left to the discretion of the pathologist. In any event, space and specialized refrigeration requirements encourage early

[1]Rose, E. T. American Journal of Clinical Pathology. 57, No. 2 pp 144-155. February, 1972

disposal of excess tissue and toxicologic material. Longer storage is deemed desirable by forensic pathologists, probably a year being the minimum acceptable time, with material in selected cases being stored even longer.

Expenses of Autopsy

The expenses are borne by the county, and there are wide variations in the costs for the services involved. The coroner's salary is set by the county board of supervisors, as are those of his deputies and secretarial personnel. In larger counties, especially those with central facilities, the autopsy surgeons, toxicologists, and other technical personnel may also be on a regular monthly salary. In a few areas, local pathologists have negotiated a flat annual fee for covering all the medical aspects of the coroner's activities. In most counties, however, the coroner has negotiated a fee structure with the local pathologist which covers his services, regardless of the extent of evaluation; or it may be a series of fees covering the gross autopsy, with increments for head examination, microscopic study of tissues, and laboratory and toxicologic studies.

These fees reflect the availability of personnel with the ability to perform the various studies. Greatest economies are possible in areas with centralized facilities; the greatest expense occurs in remote areas where specialists must be brought in from distant centers. For example, an urban area with a large number of coroner's autopsies may be able to obtain all necessary medical and laboratory studies on an annual contract averaging less than $60 per case. A remote, small county may incur expenses of up to $375 per case; and this cost may be increased if extensive toxicologic and laboratory services are involved. In most counties, however, the fee for medical studies totals between $75 and $150 per case, with the pathologist often bearing the expense of routine toxicologic and microscopic study.

Selection of Cases for Autopsy

Rising costs and limitations on county budgets have made both coroners and forensic pathologists question the need for autopsy in a high percentage of autopsies. It would seem that a significant number of cases could be certified quite safely without autopsy. For example, many cases of senile degenerative diseases, or of known malignant disease become coroner's cases only because the persons who died had not had medical attention within the last week of life. This may apply even in cases of death in convalescent hospitals or rest homes where adequate investigation can reasonably rule out foul play.

Industrial accidents pose special problems, particularly in view of the large number of "heart attacks" which involve litigation because of alleged industrial causation or aggravation. In the case of certain groups, such as police and fire department personnel, such deaths are established as "industrial" *by law,* with no need for medical opinions. In any event, a complete autopsy should be done in such cases, including an examination of the central nervous system because of possible legal requirements in this often neglected and forgotten sphere.

The coroner's inquest is used rarely. San Francisco and Los Angeles counties hold about 100 to 150 inquests each year, but most other counties report only one or two a year. Several counties said that they never hold inquests. When an inquest is held, there are usually few expenses, with the witnesses receiving no fee (or only a minimal fee), depending on time and travel involved.

Material for Scientific Research

There is great variation in policies regarding availability of reports and tissue slides for review by physicians, especially when this is for scientific and research purposes. Generally, most coroners will authorize release of slides for study by any legitimate consultant, such as a pathologist reviewing the material for defense purposes, or to industrial accident carriers. Scientific and research purposes constitute an entirely different problem, which is not authorized under present law, and coroners are reluctant to release material for such purposes. Before the material can become routinely available, changes in public law will be necessary to authorize this use and to protect the coroner from liability.[2]

In addition, all coroners are aware of the frequency of requests for material for scientific and research purposes. Often to comply with these requests would involve a direct violation of laws. Even when only minor service is requested a significant expense or labor demand might be en-

[2]Assembly Bill 1194 (Quimby) currently before the California Legislators is designed to allow the use of autopsy material for scientific, educational, and research use.

tailed, often without offer or mechanism for compensation. Although the coroner may be willing to cooperate in some circumstances, the autopsy surgeon may be reluctant because of other demands on his time. Research must not hamper the pathologist in any way in obtaining data and material necessary for the medico-legal aspects of each coroner's autopsy. Demands of research create a conflict of interests, and a distraction from the task at hand. If we are successful in getting laws modified, the use of coroner's material can be legally extended to include scientific and research purposes. However, the medical profession must remember and respect (a) the myriad of demands and pressures on the coroners and on their autopsy surgeons, (b) the basic duty of the coroner, which will always take precedence over research, (c) the pressures from morticians, and (d) the rights of the next-of-kin.

Currently, release of material is authorized readily only to those involved in litigation associated with the death in question. Even here, there is variation in coroners' policies. Most coroners will authorize the mailing of slides to legitimate consultants. Often the slides are in the custody of the autopsy surgeon, who may be reluctant to relinquish them because of the danger of loss. But as the tissue blocks are retained and slides can be easily duplicated if necessary, fear of loss seems an unjustifiable reason. It is probable that some coroners simply are not aware that slides are easy to duplicate.

All coroners will release slides upon a court order, but obtaining such an order seems an unjustifiable expense and a burden for already overworked courts. It is the opinion of most coroners, and of the Forensic Pathology Committee, that slides upon which the microscopic descriptions are based are just as much public property as the report itself.

In the opinion of forensic pathologists, coroners are generally highly motivated persons trying sincerely to carry out their responsibilities well under trying physical and economic circumstances. This motivation is probably at least as important in determining the quality of their performance as any specialized medical or legal training. Medical requests and public demands often subject the coroner to unfair and improper pressures. More physician awareness of the responsibilities and limitations of coroners is essential.